

J. Gray,
Siphon,

N^o 712.

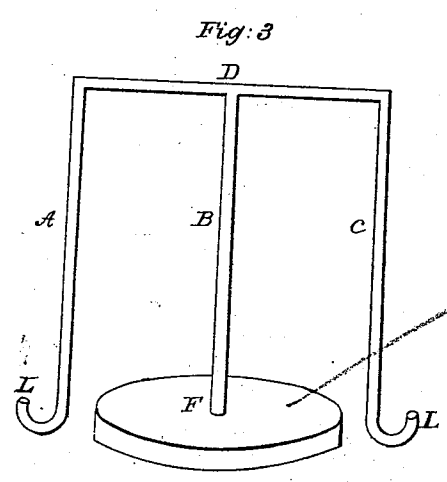
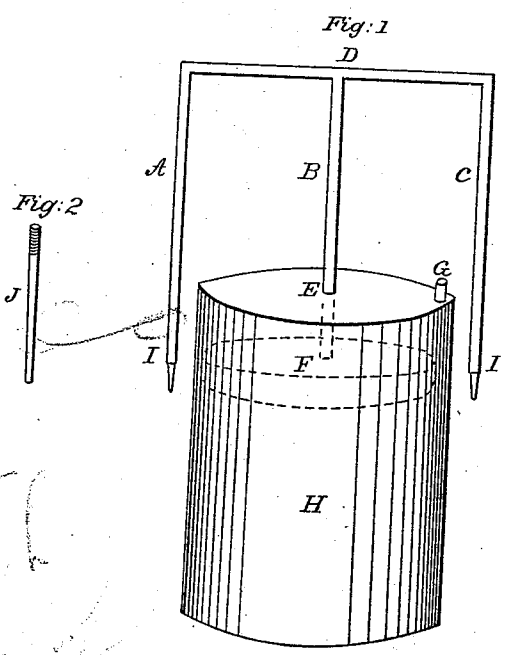
Patented Apr. 25, 1838.

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manipulate
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may insert
Wick of a
lamp

Float

UNITED STATES PATENT OFFICE.

JAMES GRAY, OF FREDERICKSBURG, VIRGINIA.

MODE OF APPLYING THE SIPHON FOR THE UNIFORM DRAWING OF OIL AND OTHER LIQUIDS.

Specification of Letters Patent No. 712, dated April 25, 1838.

To all whom it may concern:

Be it known that I, JAMES GRAY, of Fredericksburg, in the county of Spottsylvania and State of Virginia, have invented and contrived a new and useful improvement in the application of a bent tube, which is usually called a siphon, for the purposes of drawing liquid substances out of the vessel which contains them in uniform and equal quantities until the whole liquid is exhausted out of the vessel; but the two purposes to which this principle is most applicable is for dripping oil on the mandrels and bearings of machinery or for the construction of lamps.

The drawings on the other side will show how the siphon can be applied to the dripping oil on the mandrels and bearings, of machinery and also how it may be applied for lamps.

H Figure 1 is the vessel containing oil. A, D, B, a siphon. F, a float made of some light substance, to float on the surface of the oil, the siphon A, D, B attached to, and supported by the float F and to play freely through the top of the vessel at E.

Fig. 3 shows more plainly how the siphon is attached to the float at F. In that leg of the siphon (Fig. 1) which is on the outside of the vessel there is a tube of a less size made to fit closely, and to shove up and down so as to lengthen or shorten it at pleasure, (this small tube is shown at Fig. 2). The air being exhausted out of the siphon, the oil or fluid in the vessel H, will be pressed out by the weight of the atmosphere and if the small tube be drawn down below the level of the oil in the vessel it will run until the whole is exhausted, and the quantity of the drip may be increased, or diminished by shoving up or drawing out the small tube as before described.

To apply the same principle to the construction of lamps the siphon A, D, B Fig. 1 instead of having the small tube to fit in it as above described should be turned

up as at L, L in Fig. 3 the ends L, L, to be a little above the level of the oil in the vessel H Fig. 1. The air being exhausted out of the siphon the oil will be pressed over by the atmosphere and stand at L, L, on a level with the oil in the vessel H (Fig. 1) the wick of the lamp being placed in the end of the tube at L Fig. 3 and it will consume a part of the oil out of the tube, but the pressure of the atmosphere will continue to force more oil over as it is burnt until all is exhausted out of the vessel H. I am aware that the siphon is a common thing, but what I claim as new and as my invention is the using it in combination and attached to a float to support it on the surface of the liquid.

I therefore claim as new and as my invention.

1. The use of the siphon attached to a float to support it, for the purpose of drawing liquids out of the vessel which contains it in uniform and equal quantities, as described in the foregoing specifications, or in any way which is substantially the same.

2. I claim as new and as my invention the application of the siphon, for the purposes of dripping oil or any other liquid on the mandrels and bearings of machinery or for the construction of lamps, as set forth and described in the foregoing specifications, description, and drawings, and in any way which is substantially and in principle the same.

3. I claim as new and as my invention the small tube to slip up and down, in the inside or on the outside of the leg of the siphon whether to work with a screw or otherwise so as to lengthen or shorten at pleasure and for the purpose of increasing or decreasing the quantity it discharges in a given time.

JAMES GRAY.

Witnesses:

H. H. WALLACE,
JOSEPH HIBB.